



## AAS 4711 Mechatronics

61 Credits

Effective Fall 2020

*This is an overview of the program. Any suggested course sequencing is meant to serve as a guideline for your semester planning. Students are expected to see your assigned advisor to develop and review their individual educational plans. The scheduling of courses, program sequencing and curriculum are subject to change.*

### Developmental Courses (as determined through College Placement Testing)\* and Prerequisites:

\* Zero level courses must be completed with a C grade or higher.

<input type="checkbox"/>	ESL classes	<input type="checkbox"/>	Engl 050				
<input type="checkbox"/>	Engl 002	<input type="checkbox"/>	Engl 051				
<input type="checkbox"/>	Engl 003	<input type="checkbox"/>	Engl 057				
<input type="checkbox"/>	Engl 007						
<input type="checkbox"/>	FS 100/103						

\*See counselor/advisor to discuss this course or options to self-remediate and successfully place into higher- or college-level course.

### General Education Courses

<b>ENGL 110</b>	3cr	Prerequisites: Completion of ENGL 003 and 051 or 057 with a C or higher.
<b>COMM 101 or 203</b>	3cr	Prerequisites: Completion of ENGL 003 and 051 or 057 with a C or higher.
<b>Humanities and Arts</b>	3cr	Any Core A
<b>Social and Behavioral Sci. Elec.</b>	3cr	Any Core B
<b>Math, Natural &amp; Phys. Sci. Elec</b>	3cr	Any Core C
<b>Wellness</b>	1cr	See catalog for a list of Wellness Courses
<b>First Year Seminar</b>	1cr	Unless exempted by exam. See catalog for a list of approved courses

### Required Program Courses

<b>CIS 105</b>	3cr	Intro to Software for Business	Prerequisites: Compl. of Engl. 003 & 051 or 057
<b>ELOC 153</b>	4cr	Fund. of Electricity	Prerequisites: None
<b>GTEC 101</b>	3cr	Safety: OSHA 30 & NAFPA 70E	Prerequisites: None
<b>IA 101</b>	2cr	Intro to Automation	Prerequisites: None
<b>IA 107 *</b>	1cr	Shop Measurement & Calculations	Prerequisites: None
<b>IA 201</b>	4cr	Motors and Controls I	Prerequisites: ELOC 153
<b>IA 202</b>	4cr	Motors and Controls II	Prerequisites: IA 201
<b>IA 208</b>	3cr	PLC's and Automation	Prerequisites: ELOC 153
<b>IA 210</b>	3cr	Industrial Robotics I	Prerequisites: None
<b>IA 211</b> or <b>IA 213</b>	3cr	Industrial Robotics II PLC's and Automation II	Prerequisites: IA 210
<b>IA 221</b>	3cr	Sensor Technology	Prerequisites: IA201, Corequisite: IA 208
<b>IMT 108</b>	4cr	Power Transmission	Prerequisites: None
<b>IMT 110</b>	4cr	Fluid Power	Prerequisites: None
<b>ELEC 144</b> or <b>WELD 111</b> or <b>CAD 154</b>	3cr	Electronics for Technicians or Welding Applications or Computer Aided Drafting & Design	Prerequisites: ELOC 153  Prerequisites: None  Prerequisites: None

**Advising Notes**

Mechatronics courses are offered day and evening. The entire 4711 degree can be completed at the Harrisburg and Gettysburg Campus locations. Program courses are not offered every semester. Some courses only offered Fall or Spring. Please check with a full time Mechatronics instructor or advisor for up-coming term course offerings.

\*IA 107 May be replaced with a higher level Math course.

**Recommended Sequence For Full-Time Students**

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester I		Spring Semester I		Fall Semester II		Spring Semester II	
ELOC 153	4	CIS 105	3	COMM 101 or 203	3	ENGL 110	3
FYS ELEC	1	IA 201	4	MATH/SCI ELEC	3	IA 211 or 213	3
IA 101	2	IA 208	2	IA 202	4	HUM & ARTS ELEC	3
IA 107	1	IA 221	3	IA 210	3	SOC/BEHAV. SCI	3
IMT 108	4	IMT 110	4	WELLNESS	1	ELEC 144 or WELD 111 or CAD 154	3
GTEC 101	3						

**Counselor/Advisor Contact Information by Campus:**

<u>Gettysburg</u>	<u>Harrisburg</u>	<u>Lancaster</u>	<u>Lebanon</u>	<u>York</u>
Student Services	Counseling and Advising	Counseling and Advising	Receptionist Desk	Counseling and Advising
Lobby	Cooper 219	221 Main	Lobby	Leader Suite 104
717-337-3855	717-780-2498	(717) 358-2988	717-270-4222	717-801-3213